

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

Claims 1-29. (Canceled)

Claim 30. (Currently Amended) A method comprising:

receiving, at a neighborhood headend located in a neighborhood, one or more input signals from a cable distribution center;

multiplexing, by the neighborhood headend, one or more of a plurality of video channels received in the one or more input signals from the cable distribution center;

receiving, at a local service module located in the neighborhood and coupled to the neighborhood headend, the one or more multiplexed channel signals from [[a]] the neighborhood headend, the one or more multiplexed channel signals comprising a plurality of video channels;

receiving, at the local service module, a channel selection request for one of the plurality of video channels;

converting to a predetermined frequency, by one of a plurality of converters in the local service module, the one of the plurality of video channels corresponding to the channel selection request; and

combining by the local service module, the converted one of the plurality of video channels with at least one other video channel from the one or more multiplexed channel signals into a multiplexed signal for transmission to a plurality of room interface units coupled to the local service module, each of the plurality of room interface units being located at a customer location[[;]] of the neighborhood.

communicating a customer request for interactive mode from a local service module to the headend via a customer management system; and

~~communicating a channel request for non-local broadcast channels from a local service module to the headend via the customer management system.~~

Claim 31. (Previously Presented) The method of claim 30 wherein the predetermined frequency is a first predetermined frequency and further comprising:

converting, to a second predetermined frequency using another one of the plurality of converters, the at least one other video channel from the one or more multiplexed channel signals.

Claim 32. (Currently amended) The method of claim 30 further comprising: filtering, for reception by a video displaying apparatus, at least one of the video channels within the multiplexed signal wherein the video channels of the multiplexed signal are provided to and filtered by a video displaying apparatus coupled to an interface unit located at a customer location.

Claim 33. (Previously Presented) The method of claim 30 wherein the channel selection request is received from a customer.

Claim 34. (Previously Presented) The method of claim 33 wherein the channel selection request identifies the customer.

Claim 35. (Previously Presented) The method of claim 30 further comprising:
demultiplexing the one or more multiplexed channel signals at the local service module.

Claim 36. (Currently Amended) The method of claim 30 wherein at least one of the one or more multiplexed channel signals includes one or more video channels [[is]] received from any one or more, or a combination of, the following components of the neighborhood headend: a personal video recorder, a video on demand server, a personal computer, ~~or and~~ a DOCSIS frequency converter.

Claim 37. (Previously Presented) The method of claim 36 wherein the channel selection request includes at least one command to control one or more of the following: the personal video recorder, the video on demand server, the personal computer, or the DOCSIS frequency converter.

Claim 38. (Previously Presented) The method of claim 30 wherein: the predetermined frequency is one of a plurality of predetermined frequencies; and the multiplexed signal is transmitted to a plurality of room interface units, each unit being associated with one of the plurality of predetermined frequencies.

Claim 39. (Previously Presented) The method of claim 38 wherein the channel selection request is received from one of the plurality of room interface units.

Claim 40. (Previously Presented) The method of claim 38 wherein at least one of the plurality of room interface units includes authorization information that authorizes display of the one of the plurality of channels and the method further comprises:

obtaining authorization from the at least one of the plurality of room interface units to convert the one of the plurality of video channels.

Claim 41. (Previously Presented) The method of claim 30 wherein at least one of the plurality of converters is a programmable converter.

Claim 42. (Previously Presented) The method of claim 30 wherein at least one of the plurality of converters is a frequency converter.

Claim 43. (Previously Presented) The method of claim 30 wherein another local service module converts a video channel from the plurality of video channels to the predetermined frequency.

Claim 44. (Previously Presented) The method of claim 43 wherein the local service module utilizes frequencies for the plurality of converters in the local service module that are identical to frequencies utilized by a plurality of converters in the another local service module.

Claim 45. (Currently Amended) The method of claim 30 wherein the channel selection request includes a DOCSIS return channel signal for transmission to the neighborhood headend.

Claim 46. (Currently Amended) A local service module in a neighborhood adapted to receive one or more multiplexed channel signals comprising a plurality of video channels, the one or more multiplexed channel signals received from a neighborhood headend of the neighborhood, the neighborhood headend being configured to be receptive of a plurality of input signals from a cable television distribution center, and to transmit a multiplexed signal, the local service module, the local service module comprising:

a microprocessor adapted to receive a channel selection request for one of the plurality of video channels;

a plurality of converters adapted to convert to a predetermined frequency at least one of the plurality of video channels corresponding to the channel selection request;

a combiner adapted to combine the converted one of the plurality of video channels with at least one other video channel into the multiplexed signal, the local service module to transmit the multiplexed signal to a plurality of room interface units coupled to the local service module, each of the plurality of interface units being located at a customer location; and located in the neighborhood.

wherein the local service module is in communication with a customer management system, the customer management system operable to communicate a customer request for interactive mode from a local service module to the headend, and to communicate a channel request for non-local broadcast channels from a local service module to the headend.

Claim 47. (Previously Presented) The local service module of claim 46 wherein the local service module further comprises:

an input diplexer that separates a DOCSIS channel from the one or more multiplexed channel signals.

Claim 48. (Previously Presented) The local service module of claim 46 wherein the local service module further comprises:

an output diplexer that separates a DOCSIS channel from the one or more multiplexed channel signals.

Claim 49. (Previously Presented) The local service module of claim 46 wherein at least one of the plurality of converters is a programmable converter.

Claim 50. (Previously Presented) The local service module of claim 46 wherein at least one of the plurality of converters is a frequency converter.

Claim 51. (Previously Presented) The local service module of claim 50 wherein the converted one of the plurality of video channels is provided to at least one bandpass filter.

Claim 52. (Currently Amended) The system-local service module of claim 46 wherein the local service module further comprises:

a power divider adapted to divide the multiplexed channel signal into a plurality of identical multiplexed channel signals, one for each of the plurality of converters.

Claim 53. (Currently Amended) A cable distribution system, comprising:

a plurality of local service modules located in a neighborhood to receive one or more multiplexed channel signals comprised of one or more video channels, at least one or more of the multiplexed channel signals received from a neighborhood headend of the neighborhood, the neighborhood headend being configured to be receptive of one or more input signals from a cable distribution center, the local service module to multiplex one or more video channels

in the input signals into the one or more multiplexed channel signals, a selected one or more of the video channels being provided to one or more of a plurality of converters in one of the local service modules for conversion into at least one predetermined frequency for combination with another video channel into a multiplexed signal;

a plurality of room interface units associated with the plurality of local service modules, each of the plurality of room interface units to receive the multiplexed signal and filtering one of the one or more video channels from the multiplexed signal for a video displaying apparatus at a customer location in the neighborhood [[;]] and,

~~a customer management system operable to communicate a customer request for interactive mode from a local service module to the headend, and to communicate a channel request for non-local broadcast channels from a local service module to the headend.~~

Claim 54. (Currently Amended) The cable distribution system of claim 53 further comprising:

Awherein the neighborhood headend is further configured to further receive signals from a plurality of video sources, to multiplex the signals into the one or more multiplexed channel signals, and to transmit the one or more multiplexed channel signals to one or more of the plurality of local service modules, including a satellite delivery system, transportation system such as Digital to Home Platform, or other suitable cable delivery system.

Claim 55. (Cancelled)

Claim 56. (Currently Amended) The cable distribution system of claim [[55]] 53 further comprising:

a database configured to communicate with the a processor configured to communicate in communication with the neighborhood headend and the plurality of local service modules, the database for storing customer viewing preferences.

Claim 57. (Currently Amended) The cable distribution system of claim 53 wherein the neighborhood headend is a regional headend~~headend remote from a cable distribution center headend~~.

Claim 58. (New) A neighborhood headend comprising:

Receiver/decoder means for receiving at least one of a satellite dish signal and a cable television signal from a cable distribution center and for decoding and outputting in response, a first signal;

video recorder means for receiving at least one of a satellite dish signal and a cable television signal from the cable distribution center and for outputting in response, a selected second signal;

combiner means for combining the first and the second signal and for outputting a combined signal; and

diplexer means for receiving the combined signal and for outputting in response, a multiplexed channel signal to a local service module co-located in a neighborhood with the neighborhood headend.

Claim 59. (New) The neighborhood headend of claim 58 further comprising personal computer means for receiving an Internet over television signal, the personal computer means also for outputting in response, a third signal to be combined with the first and the second signal by the combiner means.

Claim 60. (New) The neighborhood headend of claim 58 further comprising frequency converter means for receiving an Internet connectivity channel and converting the Internet connectivity channel to a predetermined frequency for passage to the combiner means.

Claim 61. (New) The neighborhood headend of claim 58 wherein the receiver/decoder means comprises a block of separate integrated receiver/decoders (IRDs).

Claim 62. (New) The neighborhood headend of claim 58 wherein the video recorder means is further for receiving a signal from a broadcast television antenna.

Claim 63. (New) The neighborhood headend of claim 58 wherein the receiver/decoder means is further for receiving a satellite dish signal.